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(DEPARTMENT OF TRADE AND COMMERCE)



SUPPLY OF BASIC AND BUILDING MATERIALS IN CANADA

OUTLOOK 1951

Presented to Parliament by
The Right Honourable C. D. Howe, M. P.,
Minister of Trade and Commerce



CANADA

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INTRODUCTION

During the past five years, Canadians have invested more in new buildings and equipment than in any comparable period in the history of the country. About one-fifth of the gross national product since the end of World War II has been spent in this way. Few other countries have devoted such a large proportion of their material wealth to projects designed to increase productive capacity. From time to time during this period shortages of building materials were encountered.

This report appraises the outlook for the production and supply of basic and building materials during 1951. It is based on a survey of manufacturers' production intentions as they existed at the end of 1950. However, material shortages resulting from increased defence and related requirements may make it necessary for manufacturers to change their earlier plans substantially. A companion study released concurrently entitled **Private and Public Investment in Canada - Outlook 1951** appraises the probable level of demand for capital goods of all kinds including building materials used in new construction and for repair and maintenance purposes. These two reports, together, provide information on the likely volume of investment and repair and maintenance which may actually be achieved in Canada during the course of the year.

Thirty building materials as well as primary iron and steel and lumber are discussed here. Estimates of production in 1951 are based upon a comprehensive survey of manufacturers' intentions. If their expectations are realized, the overall supply of building materials in Canada will be somewhat greater, although less balanced than in 1950. Substantial increases in output are anticipated in the case of mineral wool and gypsum products, cast iron pipe and fittings, rigid insulating boards and certain kinds of sanitary ware and heat-

ing equipment. On the other hand, difficulties encountered in obtaining raw materials such as cement and steel and non-ferrous metals, may prevent any increase in the output of cement blocks, steel pipe and fittings, hot water storage tanks, wire nails and spikes and builders' hardware. Imports of such items as structural steel and steel sheet and plate for non-defence purposes may also be reduced.


Large gains in the production of building materials last year greatly facilitated realization of investment and repair and maintenance intentions. Few delays were encountered due to local or seasonal shortages, although cement, clay, and certain iron and steel products were in tight supply by the end of 1950. As supplies of these scarce materials are unlikely to increase to the same extent as new construction and repair and maintenance demands in 1951, contractors are expected to encounter greater difficulty in obtaining all of their requirements. Defence and other essential programs will call for increasing quantities of steel, cement and non-ferrous metal products. This will tend to delay the completion of a number of the less essential projects which are planned or already under way. It may also result in some unused plant capacity in industries which have been supplying manufactured building materials for these less essential types of construction.

Agencies of the Department of Trade and Commerce which have contributed factual material for this report include the Dominion Bureau of Statistics and the Steel and Non-Ferrous Metals Divisions. This report was prepared by Dr. John Davis, of the Economic Research Division, assisted by Mr. J.P. Lounsbury. Mr. M.J. Mahoney of the Dominion Bureau of Statistics was in charge of the survey of producers' intentions.

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Ottawa,
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SECTION I

GENERAL OUTLOOK FOR THE SUPPLY OF BASIC AND BUILDING MATERIALS IN 1951

Recent surveys of public and private investment intentions in Canada indicate that the demand for most building materials may assume record proportions during the current year. If all projects planned by government and private individuals actually go ahead, the physical volume of construction may be slightly greater than in 1950. While it is possible that production and imports of certain building materials may be sufficient to support this level of construction, supplies of such items as cement, steel rolling mill products and certain species and grades of lumber may not permit a much higher level of building activity than that achieved last year. Full realization of 1951 construction intentions is, therefore, likely to be hampered by shortages of these key building materials. The average house will probably take longer to build and completion of other capital projects may be delayed.

While fewer building materials were in short supply in 1950 than in any other post-war year, certain items, such as copper tubing, steel pipe and fittings, hot water storage tanks and wire nails and spikes, have not been readily available in recent months. Production of some of these commodities may actually decline in 1951 and imports are not expected to increase. It is also likely that manufacturers of such items as concrete building blocks, warm air furnaces and non-metallic sheathed cable may have to cut back production as supplies of cement, steel and non-ferrous metals for these purposes are reduced by defence demands. Supplies of most other building materials may show some improvement relative to demand in 1951.

In a number of cases, greater output may be possible as a result of increased capacity. Several new plants are being built and existing facilities are being expanded. This is particularly true of cement, gypsum products and pulp and fibre board. Imports will also continue to supplement domestic production in the case of such building materials as building brick, paint and window glass. Inventories, which in a number of cases have been accumulating for several years, can also be drawn upon during the course of the year.

A comparison of 1950 production with the production intentions of Canadian manufacturers for 1951 is shown in Table 1 on page 16. It indicates that a further increase in output is expected to take place in the case of twenty-six of the thirty-two basic and building materials covered in this report. Of these, three are expected to be up by 20 per cent or more. They include cast iron pressure pipe and fittings, concrete brick and building blocks and gypsum hardwall plaster. Production of another six may rise between 10 and 20 per cent. These include cast iron soil pipe and fittings, wash basins, electric water heaters, mineral wool batts, gypsum wallboard and rigid insulating boards. For another seven materials, production increases running between 5 and 10 per cent are anticipated. These commodities are warm air furnaces and heating boilers, cast iron radiators, builders' hardware, vitrified flue linings, structural tile, bulk mineral wool and gypsum lath. Output of hot water storage tanks is indicated as being down nearly 8 per cent in 1951 due largely to a shortage of galvanized steel sheet used in their manufacture. In the case of pig iron, steel rolling mill products, steel pipe and fittings, bath tubs and sinks, wire nails and spikes, sawn lumber, cement and cement pipe and tile, brick, vitrified sewer pipe, asphalt shingles, smooth and mineral surfaced rolls, paints and non-metallic sheathed cable, Canadian production is expected to show little change or to rise only slightly in 1951.

The most significant increases in production are expected to occur in gypsum products, heating equipment and rigid insulating boards. This anticipated improvement in output, together with a continuing flow of imports, may serve to meet the high level of demand for these items expected in 1951. Cement production which is expected to increase steadily during the latter half of the year, will also have an important effect upon the level of capital investment in this country. On the other hand, little improvement in deliveries of iron and steel products, other than those made by foundries can be expected to occur. This has far reaching implications with respect to the level of building construction in 1951.

It is quite likely that some of the production intentions reported in this survey will not be realized due to reduced availability of raw materials. Cement brick and block manufacturers may not obtain all of the cement which they require. They may, therefore, be unable to increase production by as much as they have indicated in their returns. Firms making bath tubs and sinks from pressed steel shapes may also be forced to curtail their output because they will be unable to obtain sufficient deliveries of enamelling sheet. Producers of warm air furnaces, electric water heaters and builders' hardware may have difficulty obtaining adequate supplies of certain steel rolling mill products. Expectations with regard to the output of non-metallic sheathed cable may also be limited by a scarcity of copper wire and insulating materials. In many cases, stocks of raw materials have already been reduced to minimum working levels and imports and shipments from domestic sources may be further curtailed.

Manufacturers of a number of products which are already in adequate supply or who expect large production increases may find that orders placed with their plants will not be required for delivery scheduled. This postponement in demand may be caused indirectly by a shortage of certain building materials such as steel pipe and fittings. Due to a scarcity of these key items, work on a number of projects will proceed more slowly and the production intentions of manufacturers making other building materials may not be realized for this reason.

The general pattern of demand for basic and building materials is expected to change in 1951. Defence and related programs will receive priority shipments of scarce materials. Some of these projects, such as dams for the generation of electric power and runways for airports will require large quantities of cement and re-inforcing steel both of which are already in tight supply. Essential industrial construction and the manufacture of munitions and related equipment will also use up additional tonnages of scarce materials like structural steel, galvanized steel sheet and semi or fully fabricated non-ferrous metal products. Smaller quantities will, therefore, be available for other types of construction. Substitution of materials may, to some extent, help to alleviate this situation. However, it is quite apparent that capital investment intentions in certain sectors of the economy will be limited by the availability of these important building materials. These considerations should be borne in mind when appraising the survey of investment intentions reported in the Department of Trade and Commerce publication, **Public and Private Investment in Canada - Outlook 1951.**

SECTION II

THE SUPPLY OF BASIC AND BUILDING MATERIALS, 1946-1950

The supply of materials used by the construction industry in Canada has shown a remarkable improvement during the post-war period. In a number of cases, domestic output has more than doubled. In others, there has been a steady year by year increase in production. On occasion, imports have supplemented supply from domestic sources. Inventories at both the manufacturing and wholesale levels have been built up and delays encountered in the construction of housing and other capital projects have been largely eliminated.

Much of the credit for this improvement in supply goes to Canadian producers of basic materials such as lumber, primary steel, non-ferrous metals and non-metallic minerals and to building materials manufacturers such as those making cement, clay, rock wool, gypsum and iron and steel products. Despite raw material and labour shortages and in spite of rundown plant with which they entered the post-war period, these producers have managed to add to productive capacity and to increase their output substantially. In previous years, there has been an understandable hesitancy to invest large sums of money in new facilities since many of these industries experienced wide fluctuations in the demand for their products in the inter-war period. The record since 1945, on the other hand reflects greater confidence on the part of many Canadian manufacturers of basic and building materials.

The following table outlines the parallel growth of the Canadian building materials and construction industries during the post-war period:

Year	Building Materials Industry		Construction Industry	
	Number Employed ¹ (thousands)	Capital Expenditures (millions of dollars)	Number Employed ¹ (thousands)	Capital Expenditures (millions of dollars)
1946.....	84	16	227	21
1947.....	98	28	252	32
1948.....	105	37	289	59
1949.....	109	38	323	42
1950 ²	114	31	326	62
1951 ³	115	53	325	40

1. Employment reported by firms with 15 or more employees.
2. Preliminary.
3. Estimated.

The extent to which production has increased during the past five years has varied with different products. This is illustrated by the following table which gives Canadian production of selected materials between 1946 and 1950 and includes estimates for 1951:

Material	Unit	Production					
		1946	1947	1948	1949	1950 ¹	1951 ²
Pig Iron	Millions of tons	1.4	2.0	2.1	2.2	2.3	2.4
Lumber	Millions of board feet	5083.3	5877.9	5908.8	5289.2	5800.0	6000.0 ³
Cement	Millions of barrels	10.7	12.2	14.0	16.1	16.5	16.9
Building Brick	Millions of bricks	305.7	334.4	347.1	366.6	392.0	406.0
Mineral Wool Batts	Millions of square feet	54.8	82.3	93.4	137.8	145.9	173.0
Gypsum Wallboard	Millions of square feet	203.4	213.7	237.7	230.6	227.4	253.3

1. Preliminary.
2. Producers' Intentions.
3. Estimated.

Imports of certain items have supplemented supplies available to the construction industry. This is particularly true of cement, building brick, gypsum products, wire nails, hardware, window glass and paints, pigments and varnishes. Foreign sources shipped more basic and building materials to Canada in 1950 than in any other post-war year as the following table shows:

Year	U.S.	U.K.	Other	Total
Imports in Millions of Dollars				
1946.....	36.3	3.7	1.4	41.4
1947.....	66.2	5.4	4.4	76.0
1948.....	64.8	8.4	5.6	78.8
1949.....	74.8	10.5	4.4	89.7
1950 ¹	75.7	17.7	4.8	98.2

1. Preliminary.

Last year, United States sources supplied 6 per cent of the dollar value of all the materials used in building construction in Canada. These shipments consisted largely of structural steel, hardwood lumber, building brick, building board and steel pipe. All other countries taken together supplied

just over 1 per cent. Shipments from these sources included cement, window glass, paints, enamels and varnishes.

The following table outlines the changing pattern of imports of selected building materials during the past five years:

Material	1946	1947	1948	1949	1950
Imports in Thousands of Dollars					
Wire Nails and Spikes	107.4	732.7	1,315.7	2,083.8	517.3
Cement	1,098.5	3,843.6	3,995.2	6,877.9	3,789.0
Building Brick	57.4	348.8	366.5	914.3	773.6
Gypsum Hardwall Plaster	165.9	173.8	201.8	186.3	414.6
Common Colourless Window Glass	2,671.8	4,716.4	6,488.4	4,397.6	4,461.4
Paints, Pigments and Varnishes	9,436.5	13,441.4	14,277.0	13,866.3	18,437.4

In order to give some historical perspective on the volume of production of a number of basic and building materials, statistics have been compiled showing Canadian output from 1946 to 1950. These are listed in Table 2 on page 17 entitled "Historical Production of Selected Basic and Building Materials in Canada, 1946-1950"

A number of important factors have influenced domestic production during the post-war period. The country emerged from World War II with expanded facilities for making such basic materials as pig iron, certain steel rolling mill products and a number of semi-fabricated non-ferrous metal and non-metallic mineral commodities, such as plywood, were also being turned out in much greater quantities. On the other hand, plants, capable of turning out many of the finished building materials required in increasing volume by the nation's growing construction program, were unequal to the task which suddenly confronted them. During the next five years, output of first one and then another of these manufactured products caught up with demand as additional capacity was brought into operation. Roofing materials, electric water heaters and paints pigments and varnishes were in fairly good supply in 1948. By the middle of 1949, plumbing supplies, sanitary ware and heating equipment made from domestic pig iron and scrap were readily available. Later that year and during the first half of 1950, the supply of most steel items was also sufficient to meet the requirements of the nation's construction program. Only in the case of cement, clay and gypsum products have shortages persisted throughout the entire post-war period.

A number of steps, taken by the Federal Government, have helped to overcome critical shortages. In 1947 and 1948, assistance was given in the procurement of steel scrap from abroad. This took the form of a subsidy and was discontinued when war-depleted inventories reached satisfactory levels late in 1949. The Government also directed and assisted the movement of a large tonnage of semi-finished steel from mills with insufficient finishing capacity to those capable of finishing this steel into needed mill forms. This helped to increase Canadian production of steel sheet, rods, bars and wire products. In 1949, special arrangements were made with the United States Government to permit the importation of sufficient rod to keep Canadian nail mills operating at capacity. In 1947, 1948 and 1949, Federal administrators arranged for the channelling of scarce materials to building materials manufacturers. Various production inventives were

provided in order to increase output of items which were still in short supply. Export controls were also retained on essential commodities for which demand in Canada exceeded supply.

The improvement in availability of building materials over the post-war period is illustrated by the fact that the average housing unit, which took 11 months to build in 1946, took only 7 months in 1949. A number of manufacturers of building materials reported open plant capacity early in 1950. At the time, stocks held at their plants were higher than at any time since the end of World War II. Table 3 on page 18 outlines the improvement in the general inventory position since 1945.

Since the middle of last year, a number of important changes have taken place. Defence and other related requirements, which had disappeared by 1946, have again been making themselves felt. Basic materials, particularly steel and non-ferrous metals, are no longer as readily available to building materials manufacturers. Channelling of these commodities into munitions manufacture and other essential end uses is already limiting production of fabricated building materials in Canada.

The effect which these shortages have already had on Canadian output is reflected in Tables 2 and 4 on pages 17 and 19 in this report. These are entitled "Historical Production of Selected Basic and Building Materials in Canada, 1946-1950" and "Production Intentions and Realizations for Selected Building Materials in Canada, 1950". They show that, whereas manufacturers expected to maintain or to increase production in the case of twenty-eight out of the twenty-nine materials covered in that survey, output in 1950 actually exceeded that of 1949 in only twenty-two of these items. Six of these materials, in which production expectations were not realized, are made from iron and steel. Shortages of raw materials have been primarily responsible for this curtailment in operations.

SECTION III

CURRENT SUPPLY AND OUTLOOK FOR PRINCIPAL BASIC AND BUILDING MATERIALS

IRON AND STEEL PRODUCTS

The supply of building materials made from iron and steel showed a marked improvement in 1949 and the first half of 1950. However, since then, production has been limited by the availability of raw materials. The following sections discuss the short-term outlook as far as the supply of basic

iron and steel is concerned. They cover raw materials such as pig iron, iron scrap and steel sheet and skelp used in the manufacture of building materials as well as other steel rolling mill products such as structural steel, galvanized sheet and steel bar which are used directly in building construction.

(1) Pig Iron

The following table outlines Canadian production, imports and exports of pig iron since 1939:

Year	Production	Imports	Exports	Domestic Supply
Thousands of Tons				
1939.....	846	1	12	835
1942 (war peak).....	1,975	1	—	1,976
1946.....	1,406	12	1	1,417
1947.....	1,963	9	1	1,971
1948.....	2,126	7	1	2,132
1949.....	2,154	21	13	2,162
1950.....	2,320	30	195	2,155
1951.....	2,350 ¹	2	2	2

1. Estimated.

2. Not available.

Note. Short tons are used throughout this report.

The overall supply of pig iron reached a peak in 1949 when twelve Canadian blast furnaces turned out nearly 2.2 million tons of new metal. Since then, domestic output has risen further. Imports, which are relatively small, have also increased. Exports rose sharply in the period between April and December 1950 when government controls were not in effect. As a result, the domestic supply of pig iron has been reduced in recent months. However, taking the year as a whole, it was only slightly lower than in 1949.

As far as 1951 is concerned, domestic production will probably increase as a result of the operation of a new 300 thousand ton a year blast furnace at Hamilton. This is expected to be in operation soon after the middle of the year. Another 450 thousand ton a year furnace to be built at Stelco will not be producing pig iron until late in 1952. Pig iron is also a by-product of the smelting of titanium ores. It is expected that production from the new plant at Sorel, Quebec will reach 175 thousand tons annually in a few years time. However, little will be available from this source in 1951. As of January, 1951, pig iron was again placed under export control. Exports will therefore be lower during the current year. Between 2.2 and 2.3 million tons of pig iron may, therefore,

be available to Canadian industry over the next 12 months. In spite of this improvement in supply the requirements of the defence and defence-associated programs will prevent any lessening in the current pressure on scrap.

In recent years, approximately 80 per cent of the pig iron consumed in Canada has been charged to steel furnaces. The remaining 20 per cent has been divided almost equally between foundry and malleable pig iron used in the manufacture of castings. Only a relatively small proportion of the basic pig iron made by the primary steel industry is sold to other steel using industries. On the other hand, very little of the foundry and malleable pig iron is used directly by the primary producers themselves.

Demand for basic pig iron, which remained virtually unchanged from 1947 up until the middle of 1950, has since shown a moderate increase. In 1951, an additional 75 thousand tons will be needed in order to support a somewhat higher level of domestic steel production.

(2) Rolling Mill Products

The following table outlines Canadian production, imports and exports of rolling mill products in recent years:¹

Year	Production ²	Imports	Exports	Domestic Supply
Thousands of Tons				
1939.....	1,080	463	179	1,364
1942 (war peak).....	2,145	1,452	87	3,510
1946.....	1,633	722	194	2,161
1947.....	2,070	907	188	2,789
1948.....	2,246	949	277	2,918
1949.....	2,240	1,169	231	3,178
1950.....	2,405	1,079	238	3,246
1951.....	2,500 ³	4	4	4

1. These figures do not include steel castings.

2. Production from domestic ingot actually leaving Canadian plants.

3. Estimated.

4. Not available.

Expressed in ingot tons equivalent the above table would read as follows:

Year	Production	Imports	Exports	Domestic Supply
Thousands of Tons				
1939.....	1,490	638	247	1,881
1942 (war peak).....	2,959	2,002	120	4,841
1946.....	2,252	995	268	2,979
1947.....	2,855	1,251	259	3,847
1948.....	3,099	1,309	382	4,026
1949.....	3,089	1,612	319	4,382
1950.....	3,317	1,488	328	4,477
1951.....	3,450 ³	4	4	4

3, 4. See above.

Domestic supply of rolling and wire mill products reached a post-war peak in 1950. Although imports from the United States declined sharply during the first six months of last

Canadian consumption of foundry and malleable pig iron has varied much more widely over the past few years. In the years from 1946 to 1948, manufacturers of farm implements, industrial machinery and railway rolling stock were increasing their output. Therefore, their consumption of pig iron rose steadily throughout this period. In 1949 and the first half of 1950, demand from these industries declined. However, with the exception of farm machinery, this trend has since been reversed. Throughout the post-war period, consumption in plants making sanitary ware and cooking and heating equipment has continued steadily upward.

In 1951, increased demands are expected in most of these industries. Canadian requirements for foundry and malleable pig iron together may, therefore, be about 100 thousand tons greater than it was last year.

Overall demand for pig iron of all types in 1951 is likely to be somewhat greater than in 1950. These increased needs may be met by a reduction in exports, and, after the middle of the year, by additional production in this country.

year this downward trend was almost entirely offset by heavy shipments from overseas sources during the last quarter of the year. Production which rose by 165 thousand tons accounted for the net improvement in domestic supply.

The moderate decline in imports of drawn and rolled products in 1950 relative to 1949 has been due to several factors. The steel and coal strikes which occurred in the United States late in 1949, together with relatively more attractive Canadian mill prices following devaluation, were largely responsible for the lower rate of United States shipments to Canada during the first half of last year. A number of steel using firms also reduced their inventories. Following the outbreak of war in Korea, the shortage of steel in the United States prevented imports from entering this country at their usual rate. As far as steel from other countries is concerned, shipments increased. Exports to Canada from the United Kingdom in 1950 amounted to approximately 217 thousand tons compared with 78 thousand tons in 1949. The total tonnage entering Canada from all non-United States sources rose from 130 thousand tons in 1949 to over 299 thousand tons last year.

Up until early in 1950, Canadian producers at Algoma and Sydney were shipping approximately 360 thousand tons of steel ingots, billets and slabs annually to Montreal and Hamilton for further processing. This arrangement permitted near capacity operation of Canadian rolling mills and ensured that a maximum tonnage of finished products would be available for domestic steel using industries. With the termination of Steel Control on March 31, 1950, these inter-plant shipments declined. During the nine-month period April-December 1950, when steel controls were in abeyance some of this steel went to the United States. At the same time, other mills with excess rolling mill capacity entered into "conversion deals", bringing in primary shapes from the U.S., breaking them down to sheet, bar, angles, etc., and exporting them again. These latter movements, which amounted to approximately 25 thousand tons of steel during the last 9 months of 1950, have inflated both the Canadian import and export statistics.

Some improvement in the supply of rolling mill products in 1951 is in prospect, particularly those necessary for the defence and preparedness program. Canadian production may increase by as much as 100 thousand tons due to the adoption of improved smelting and fabricating techniques and the re-opening of marginal plant. Exports will be reduced somewhat by a return to the inter-plant shipment arrangements in effect in 1949 in order to obtain maximum production from existing overall capacity. As of January, 1951, export of semi-finished steel for further processing was prohibited. The prospective level of imports is more difficult to estimate. Shipments from the United Kingdom and Europe may continue at about the 1950 level. On the other hand, tonnage allocations of steel from United States sources will be based largely upon Canadian defence and preparedness requirements.

An indication of what these requirements are, is given by the figure for imports from the United States in 1942, when the World War II effort was reaching its peak. In that year Canada obtained 1.5 million tons of steel from American mills. Since then, Canadian manufacturing industries have grown greatly. Large scale iron ore and petroleum developments have occurred and are continuing. Both are heavy steel users. Our population has increased by more than a million people. Plainly, if full use is to be made of Canadian productive capacity in the joint defence effort of the North Atlantic Treaty nations, there will have to be heavy reliance upon larger imports from the United States; perhaps for as

much as double those of 1950. Such steel, if obtained, will be of types essential to the defence and preparedness program. On balance, therefore, it is likely that, although domestic supply of rolling mill products taken as a whole may indeed be higher in 1951 than in 1950 due to higher imports from the United States, nevertheless availabilities for construction purposes of a less urgent nature may well be lower. Imports for use by such industries will tend to be limited to steel brought in by warehouses, or to special inter-company arrangements functioning outside the D.O. priority system in the United States.

(3) Plumbing Supplies

Plumbing supplies came into reasonably good supply in Canada late in 1949. During that year, sizable inventories accumulated, with the result that these building materials were not difficult to obtain during the first half of 1950. Throughout the year, production of pipe and fittings made from cast iron has been roughly in step with demand and few shortages were reported. On the other hand, the supply of steel pipe declined. Manufacturers' stocks of each of these items are now lower than they were a year ago.

Domestic production of cast iron soil and pressure pipe and fittings began to catch up with demand in 1949. This was due largely to a better supply of raw materials such as pig iron and iron scrap. In 1950 the level of production was determined largely by demand factors. Deliveries were usually prompt with shortages being confined to the more remote areas.

The following table outlines the domestic supply and domestic disappearance of cast iron soil pipe and fittings since 1946:

Year	Production	Exports	Domestic Supply	Stocks at Dec. 31	Domestic Disappearance
Thousands of Tons					
1946.....	25.1	0.2	24.9	1.3	24.6
1947.....	32.5	0.2	32.3	1.6	32.0
1948.....	45.7	0.7	45.0	2.9	43.7
1949.....	47.6	1.0	46.6	4.9	44.6
1950 ¹	53.6	1.5	52.1	4.2	52.8
1951.....	59.5 ²	3	3	3	3

1. Preliminary.
2. Producers' intentions.
3. Not available.

Production and stocks of cast iron pressure pipe and fittings since 1946 are as follows:

Year	Production	Stocks at Dec. 31	Domestic Disappearance
Thousands of Tons			
1946.....	65.2	3	3
1947.....	77.7	2.3	3
1948.....	93.4	4.7	91.0
1949.....	91.5	8.3	87.9
1950 ¹	87.9	6	89.6
1951.....	109.9 ²	3	3

1. Preliminary.
2. Producers' intentions.
3. Not available.

Canadian manufacturers expect to increase production in 1951. These additional supplies will probably take care of any further increase in consumption which may be encountered during the next twelve months.

The steel pipe situation was eased considerably in 1949 by substantial imports of skelp from the United States. In that year production was higher than at any time in the post-war period. Large stocks were carried over into 1950. These were drawn down as demand increased and domestic output declined. The latter was caused by lower skelp imports, particularly during the first nine months of 1950. Deliveries to the construction industry have become more and more extended as the year progressed and steel pipe and fittings are in short supply at the present time. The following table illustrates the trend in domestic supply and domestic disappearance between 1946 and 1950:

Year	Production	Exports	Domestic Supply	Stocks at Dec. 31	Domestic Disappearance
Thousands of Tons					
1946.....	115.7	3.2	112.5	17.2	104.7
1947.....	118.0	0.2	117.8	6.7	128.3
1948.....	132.0	2.8	129.2	8.9	127.0
1949.....	192.1	16.8	175.3	17.6	166.6
1950 ¹	167.3	5.9	161.4	15.0	164.0
1951.....	167.3 ²	3	3	3	3

1. Preliminary.
2. Producers' intentions.
3. Not available.

Steel pipe will probably remain in tight supply during the next twelve months because manufacturers are unlikely to obtain sufficiently large shipments of skelp to keep their mills operating at capacity. Canadian production may therefore show little change from that of 1950. Inventories are already low and a continuance of present high levels of demand will only serve to bring increased pressure to bear on supply.

(4) Sanitary Ware

A distinct improvement took place in the availability of sanitary ware in 1949 and 1950. Last year, supplies of bath

tubs, sinks and wash basins were generally adequate. Inventories, which had been built up in the previous year were

drawn down in the case of items where demand was strongest and in certain plants production of other items, such as sinks, were cut-back in step with the continuing requirements of the construction industry.

The improvement in deliveries over the past few years had been due entirely to increased domestic production. Imports fell abruptly after the introduction of import controls late in 1947. Greater output became possible as new plant came into operation and raw materials, such as pig iron and iron scrap, became more readily available in 1948 and 1949. Producers of vitreous china ware encountered few supply difficulties. Only in the case of enamelled steel sheet, have shortages recently brought about a reduction in output. Because of this, enamelled steel sinks and bath tubs are now in tight supply. Most other kinds of sanitary ware are readily available. A scarcity of hot-water and septic and fuel oil tanks and of steel and copper pipe and tubing is now affecting the demand for these items by slowing down housing completions and some other types of construction.

The following table outlines production and inventories of certain items of sanitary ware in Canada since 1946:

Year	Production			Stocks at December 31		
	Bath Tubs	Sinks	Wash Basins	Bath Tubs	Sinks	Wash Basins
Thousands of Units						
1946.....	57.9	103.7	78.6	1.0	3.5	3.9
1947.....	81.1	120.7	91.7	1.5	4.8	6.8
1948.....	102.1	139.6	109.7	0.6	4.3	3.1
1949.....	127.4	188.3	137.1	1.2	13.9	6.8
1950 ¹	138.0	177.7	201.8	1.1	7.5	10.2
1951 ²	138.6	177.8	232.5	3	3	3

1. Preliminary.
2. Producers' intentions.
3. Not available.

The outlook in 1951 is for some increase in the output of items such as wash basins and bath tubs which are presently in greatest demand. As far as cast iron ware is concerned Canadian producers will probably take care of most construction requirements during the next 12 months. Only in the case of tubs and sinks made from pressed steel sheet are shortages likely to be encountered.

(5) Heating Equipment

The availability of heating equipment has varied from item to item.

Production of **electric water heaters** has risen steadily throughout the post-war period and supply caught up with demand in 1948. Since then, sizeable inventories have accumulated and output has been based on continuing requirements.

Cast iron radiators have been in good supply since 1947. Demand has been limited by the quantity of steel pipe available for the installation of hot water heating systems and production in 1949 and 1950 has continued at a lower rate than in the immediate post-war years.

Production of **furnaces** has been increasing. Cast iron parts became more readily available in 1949 as foundries began to receive adequate shipments of pig iron and scrap. By the early months of 1950, deliveries of steel sheet had also improved and production increases were sufficient to

bring the supply of warm air furnaces and heating boilers roughly into balance with demand. In recent months, steel sheet has again become a production problem. At the same time, distributors who are having difficulty obtaining sufficient quantities of ducting material are frequently unable to complete installations and demand for this equipment is being affected in this way.

The supply of **hot water storage tanks** has been affected to an even greater extent by the present shortage of steel rolling mill products. During the first half of 1950, range boilers could be obtained at relatively short notice. However, in recent months, production has been limited by shipments of galvanized sheet and inventories at all levels are being reduced. At the present time, slow deliveries are tending, more than anything else, to delay construction of housing units.

The following table outlines production and stocks of heating equipment in the post-war period:

Year	Production				Stocks at Dec. 31		
	Warm Air Furnaces and Heating Boilers	Electric Water Heaters	Hot Water Storage Tanks	Cast Iron Radiators ¹	Electric Water Heaters	Hot Water Storage Tanks	Cast Iron Radiators ¹
Thousands of Units							
1946.....	60.9	76.6	138.4	8.0	0.8	0.1	0.4
1947.....	72.4	121.0	157.7	8.7	3.9	0.3	0.5
1948.....	82.4	146.7	180.6	8.6	12.1	0.2	0.6
1949.....	94.9	184.7	189.1	7.2	18.1	1.2	0.6
1950 ²	109.3	226.9	188.2	7.5	24.0	2.8	0.5
1951 ³	118.2	267.4	173.8	8.1	4	4	4

1. Millions linear feet.
2. Preliminary.
3. Producers' intentions.
4. Not available.

As far as 1951 is concerned, it is likely that electric water heaters and cast iron radiators will continue to be in good supply. Shortages of steel sheet will probably have a much greater effect on production of furnaces and hot water storage tanks than in 1950 and producers' intentions may not

be realized. At the same time, installation of furnaces may be curtailed by the inability of builders to obtain steel ducting. In the case of both furnaces and hot water storage tanks, there is little likelihood that imports will serve to supplement domestic production to any large extent.

(6) Other Iron and Steel Products

Wire nails and spikes and builders' hardware were more readily available in 1950 than in any other post-war year including 1949. This was due to large inventories at the beginning of the year and to a moderate decline in sales in the first half of 1950 relative to the same period in 1949. However, as the year progressed, producers were unable to keep up with demand and stocks were reduced to lower levels than at any time since 1948.

In the case of wire nails and spikes, supplies entering the market in 1950 were 12 per cent lower than in 1949. This

was mainly due to a sharp drop in imports. Canadian output was also somewhat lower than in the previous year. While a few firms reduced their output early in 1950 due to a lack of orders, the industry as a whole was mainly concerned with a shortage of raw materials particularly after the middle of the year. Recently, several mills have been forced to work part time due to a shortage of nail rod.

The following table outlines the domestic supply and domestic disappearance of wire nails and spikes in Canada since 1946:

Year	Domestic Production	Imports	Exports	Domestic Supply	Stocks at Dec. 31	Domestic Disappearance
Thousands of Tons						
1946.....	58.9	0.7	1.3	58.3	3.1	59.9
1947.....	77.4	4.1	—	81.5	4.4	80.2
1948.....	86.8	6.3	1.9	91.2	3.4	92.2
1949.....	88.5	13.3	0.5	101.3	5.6	99.1
1950 ¹	85.6	3.2	—	88.8	3.5	90.9
1951.....	85.6 ²	3	3	3	3	3

1. Preliminary.
2. Producers' intentions.
3. Not available.

As a result of the decline in supply, contractors and builders across the country have had difficulty obtaining their requirements of wire nails and spikes in recent months. Little boarding is taking place and most shipments are going directly to building sites. There is every likelihood that this situation will continue throughout 1951. Domestic output will be limited by Canadian production of nail rod. Imports are unlikely to be much higher than they were in 1950 and, therefore, little improvement in the present tight supply situation can be expected this year.

The situation with regard to builders' hardware is quite different. Up until the middle of 1950, supply exceeded demand and several producers cut back production as imports increased. However, following the outbreak of war in Korea, domestic sales of builders' hardware rose rapidly and Canadian output revived. In recent months, manufacturers have encountered some difficulty in obtaining raw materials, particularly special shapes and alloy steels from the United States. The following table illustrates trends in Canadian domestic production, imports and exports of builders' hardware:

Year	Production	Imports	Exports	Domestic Supply
Value in Millions of Dollars				
1946.....	5.6	0.7	0.9	5.4
1947.....	5.9	1.0	1.3	5.6
1948.....	9.8	1.1	0.6	10.3
1949.....	9.6	1.2	0.3	10.5
1950 ¹	8.9	1.4	0.3	10.0
1951.....	9.5 ²	3	3	3

1. Preliminary.
2. Producers' intentions.
3. Not available.

As far as 1951 is concerned, manufacturers may continue to operate at a somewhat higher level of output than their average in 1950. Some increase in supply from domestic sources may offset a possible decline in imports. Inventories are still substantial and shortages which might otherwise result from a moderate increase in demand may be prevented by a drawing down of stocks.

LUMBER

No serious delays were encountered in 1950 due to a shortage of lumber. However, taken together, export and domestic demands exceeded production. Inventories at all levels were reduced and prices rose sharply during the summer

months. Local shortages were encountered in the third quarter of the year, particularly in South-Eastern Ontario.

Figures showing the supply and domestic disappearance of lumber in recent years are given in the following table:

Year	Production	Imports	Exports	Domestic Supply	Stocks at Dec. 31	Domestic Disappearance
Millions of Board Feet						
1946.....	5083.3	59.1	2083.3	3059.1	475.0	3054.1
1947.....	5877.9	114.9	2735.0	3257.8	502.6	3230.2
1948.....	5908.8	42.9	2467.7	3484.0	692.6	3294.0
1949.....	5289.2	80.6	2189.5	3180.3	744.4	3128.5
1950 ¹	5800.0	85.0	3300.0	2585.0	500.0	2829.4
1951.....	6000.0 ²	3	3	3	3	3

1. Preliminary.
2. Estimated.
3. Not available.

A year ago, substantial stocks of lumber were on hand at Canadian saw mills. Wholesalers and retailers also held fairly large inventories. For this reason, large export shipments did not have an immediate effect upon deliveries of boards and dimension stock in this country. Later in 1950, definite shortages threatened to occur. However, a sharp drop in United States purchases in September brought on by credit restrictions and the general expectation of a recession in home building served to relieve the situation here. Since then large contracts have been placed by the United Kingdom and Canadian mills have continued to operate at capacity. Only in the case of certain West Coast shingle mills which depend largely on the United States market have mill operations been curtailed in recent months.

Saw mills and lumber wholesalers commenced 1951 with much lower inventories than they had on hand twelve months ago. Production will probably increase somewhat and imports may remain about the same as in 1950. Exports to the United States may be lower than last year due primarily to much larger contracts with the United Kingdom and elsewhere. However, United States buyers are attempting to increase their purchases

at the present time. It therefore appears that saw mill products will not be as readily available in the first half of 1951 as they were during the corresponding period a year ago. During the latter half of this year, they will probably remain in tight supply and local shortages may actually delay construction in this country.

Hardwood flooring was in fairly tight supply throughout the year despite the fact that production continued at near capacity levels. Shortages of domestic woods prevented further increases in output. Deliveries of **fir plywoods** were slow even though Canadian factories were operating continuously during the past twelve months. **Birch plywood**, on the other hand, was in good supply.

In 1951 little change is expected either with regard to flooring or plywood. Availability of the latter may actually deteriorate somewhat due to some increase in exports already on contract with the United Kingdom and to the expansion of higher priority uses. In neither case is Canadian production expected to increase materially.

CEMENT AND CEMENT PRODUCTS

During the past year, cement and cement products were in somewhat better supply in Canada than they were in 1949. However, seasonal shortages of **Portland cement** were encountered in the Maritime Provinces, Quebec, Ontario and Alberta. Local shortages of special grades of raw cement were also encountered right across the country.

This improvement in deliveries was due entirely to an increase in Canadian production. Domestic output rose from 16.1 million barrels in 1949 to about 16.5 million barrels in 1950. At the same time, overall consumption showed little change from one year to the next.

During the first half of 1950, the demand for raw cement was appreciably lower than that encountered in the same period

in 1949. Manufacturers' stocks increased and production was cut back somewhat. Imports also entered the country at a much lower rate than in the previous year. However, during the second quarter, a more than seasonal increase in consumption took place. This necessitated maximum production well into the fourth quarter of the year and brought about a decline in manufacturers' stocks. In order to meet these additional requirements, imports were also increased during the latter half of 1950. Shortages in the United States and delays in shipments from the United Kingdom served to limit supplies entering this country.

The following table outlines the trend in the supply and domestic disappearance of cement since 1946:

Year	Production	Imports	Exports	Domestic Supply	Stocks at Dec. 31	Domestic Disappearance
Millions of Barrels						
1946.....	10.7	0.4	0.1	11.0	0.5	11.9
1947.....	12.2	1.2	0.1	13.3	0.7	13.1
1948.....	14.0	1.1	0.1	15.0	0.6	15.1
1949.....	16.1	2.3	—	18.4	0.8	18.2
1950 ¹	16.5	1.4	—	17.9	0.7	18.0
1951.....	16.9 ²	3	3	3	3	3

1. Preliminary.
2. Producers' intentions.
3. Not available.

Building construction, particularly for industrial and defence purposes, will probably show a moderate increase in 1951. Present plans of commercial establishments and institutions also involve a somewhat higher level of building activity. A shortage of steel will also augment the demand for cement for re-inforcing purposes. On the other hand, requirements for power development purposes and of Government for highway construction and public works will probably be somewhat lower during the current year. On balance, Canadian consumption of cement in 1951 will likely be somewhat greater than in 1950.

Some improvement in domestic supply is expected to take place. Production may be up several hundred thousand tons for the year as a whole. Two new plants with a total annual capacity of 1.2 million barrels are expected to commence operations soon after the middle of this year. Their initial output may be sufficient to prevent a recurrence of the regional shortages encountered in the Maritime Provinces and Quebec in 1950. Other new facilities capable of making 2.4 million

barrels of cement a year are also being built in Ontario, Alberta and British Columbia. However, these will not be in operation until around the middle of 1952. Imports may, therefore, be necessary on a fairly large scale during the height of the building season. On the whole it appears likely that cement will be in fairly tight supply throughout most of 1951 and that builders will have greater difficulty obtaining cement during the first half of the year than was the case in 1950.

Last year, **cement bricks and building blocks** were in fairly good supply, although temporary shortages were reported in a few localities. Manufacturers of these products obtained practically all of the raw cement which they required and they were able to increase their output by about one third. However, it is doubtful whether they will be able to more than maintain last year's rate of production in 1951. Cement will probably be diverted to other more essential projects involving monolithic concrete. Thus, although the demand for concrete brick and building blocks will probably exceed supply, there will probably be a certain amount of open capacity in this industry in 1951.

During 1950, **cement pipe and tile** was in fairly short supply in the summer and autumn months. Manufacturers encountered a seasonal shortage in cement and demand for these products increased due to a scarcity of cast iron and large diameter steel pipe. In 1951, this industry will probably

be getting the bulk of its cement requirements on a priority basis and output will probably be as great as it was last year. Demand, on the other hand, may be up somewhat and deliveries may be more extended than they were last year.

CLAY PRODUCTS

The supply of building brick and other clay products has increased steadily since the end of World War II. Despite this, regional shortages were encountered during the latter half of 1950.

In the case of **building brick**, Canadian production last year increased more than enough to offset a moderate decline in imports. As a result, domestic supply improved by over 5 per cent relative to 1949. At the same time consumption rose

by about 10 per cent. Manufacturers' inventories have been drawn down over the past twelve months. Seasonal shortages of clay brick were encountered in Quebec and Ontario last year. Elsewhere in Canada, producers were usually in a position to meet local demands as and when they arose.

The following table outlines trends in domestic supply and domestic disappearance of building brick in recent years:

Year	Domestic Production	Imports	Exports	Domestic Supply	Stocks at Dec. 31	Domestic Disappearance
Millions of Bricks						
1946.....	305.7	1.1	6.1	300.7	18.9	300.8
1947.....	334.4	8.9	4.2	339.1	21.2	336.8
1948.....	347.1	8.3	4.9	350.5	21.2	350.5
1949.....	366.6	21.9	4.3	384.2	31.3	374.1
1950 ¹	392.0	16.2	2.8	405.4	25.3	411.4
1951.....	406.0 ²	3	3	3	3	3

1. Preliminary.
2. Producers' intentions.
3. Not available.

In 1950, most other clay building materials were in fairly good supply. In the case of **vitrified flue linings**, this was due partly to the accumulation of substantial stocks in previous

years. In each case, production in 1950 was greater than that of 1949 as the following figures on output show:

Year	Vitrified Flue Linings (millions of ft.)	Vitrified Sewer Pipe (millions of ft.)	Structural Tile (thousands of tons)
1946.....	0.9	3.1	134.4
1947.....	1.0	4.0	150.2
1948.....	1.2	5.1	157.3
1949.....	1.2	4.4	172.5
1950 ¹	1.3	5.4	179.0
1951 ²	1.4	5.6	192.1

1. Preliminary.
2. Producers' intentions.

In 1951, manufacturers of building brick, vitrified flue linings, vitrified sewer pipe, and structural tile expect to increase their output. Since they are unlikely to encounter serious raw material difficulties and improved processing equipment and techniques are being introduced, it is likely that these intentions will be realized. At the same time,

demand for these clay products is expected to increase somewhat more than production intentions indicate. As a result, seasonal shortages are likely to occur during the coming year and substitutes, such as transit pipe and cement brick will continue to be used in large quantities.

MINERAL WOOL PRODUCTS

Mineral wool products used for insulating purposes have been in adequate supply since 1948. Since then, production has kept in step with demand and imports have been reduced to a minimum. Manufacturers' stocks reached satisfactory

levels in 1949. No shortages of either mineral wool batts or bulk mineral wool were reported in 1950.

The following table outlines the domestic supply and domestic disappearance of **mineral wool batts** since 1946:

Year	Domestic Production	Imports	Domestic Supply	Stocks at Dec. 31	Domestic Disappearance
Millions of Square Feet					
1946.....	54.8	7.8	62.6	0.4	62.3
1947.....	82.3	5.8	88.1	0.6	87.9
1948.....	93.4	0.1	93.5	0.6	93.5
1949.....	137.8	0.1	137.9	2.0	136.5
1950 ¹	145.9	0.2	146.1	1.7	146.4
1951.....	173.0 ²	3	3	3	3

1. Preliminary.
2. Producers' intentions.
3. Not available.

GYPSUM PRODUCTS

Gypsum products were more readily available in 1950 than in 1949. In Western Canada, new plant capacity came into operation and supplies were adequate throughout most of last year. In the Maritimes, Ontario and Quebec, local shortages were encountered and manufacturers continued to allocate their output to wholesalers. Only small shipments were received from the United States and the United Kingdom. While Canadian production of **gypsum wallboard** declined

Practically all of the **bulk mineral wool** used in Canada is made in this country. Production which averaged around 10 million cubic feet between 1946 and 1948 rose to 14.8 million cubic feet in 1949. Since then, some open capacity has been available in the industry. Output last year was cut back to 14.1 million cubic feet following a decline in domestic sales.

Canadian manufacturers expect to increase their production of mineral wool batts by about 18 per cent in 1951. The new plant which came into production in Western Canada last year should operate at capacity during 1951. Output of bulk mineral wool may also be up by about 6 per cent. For this reason and because large stocks of these building materials are already available in the country, no shortages of these products are likely to be encountered over the next twelve months.

slightly in 1950 relative to 1949, output of **gypsum lath** showed a marked increase. Demand for lath increased more rapidly than for wallboard and the pattern of production reflected this trend.

The following table outlines Canadian production and stocks of gypsum wallboard and lath from 1946 up until the present time:

Year	Gypsum Wallboard		Gypsum Lath	
	Production	Stocks at Dec. 31	Production	Stocks at Dec. 31
Millions of Square Feet				
1946.....	203.4	1.8	75.0	0.7
1947.....	213.7	1.2	111.1	0.6
1948.....	237.7	1.6	153.0	0.5
1949.....	230.6	1.2	174.0	0.7
1950 ¹	227.4	2.6	218.9	2.1
1951.....	253.3 ²	3	240.4 ²	3

1. Preliminary.
2. Producers' intentions.
3. Not available.

The outlook for 1951 is for some improvement in supply due to increased domestic production. Some new manufacturing capacity will be coming into operation and facilities which started up in Western Canada in 1950 will be fully utilized in 1951. While shortages of these building materials may continue to occur in Quebec, Ontario and the Maritime Provinces, existing plants are being expanded and overall demand and supply may be in better balance. For this reason, some further improvement in deliveries of gypsum wallboard and lath may be anticipated.

In the case of **gypsum hardwall plaster**, production has been increasing steadily throughout the post-war period. Imports rose sharply last year. However, plaster was still on allocation in certain localities in 1950. Canadian manufacturers expect to expand output still further in 1951. For this reason, deliveries will probably improve during the course of the year.

The following table outlines domestic supply and stocks at December 31 since 1946:

Year	Domestic Production	Imports	Exports	Domestic Supply	Stocks at Dec. 31	Domestic Disappearance
Thousands of Tons						
1946.....	97.3	7.6	1.0	103.9	0.6	103.9
1947.....	119.7	10.1	1.4	128.4	0.5	128.5
1948.....	137.1	10.0	0.7	146.4	0.9	146.0
1949.....	160.8	8.7	0.2	169.3	0.8	169.4
1950 ¹	166.3	22.4	0.1	188.6	0.8	188.6
1951.....	199.7 ²	3	3	3	3	3

1. Preliminary.
2. Producers' intentions.
3. Not available.

ROOFING PRODUCTS

Asphalt shingles and smooth and mineral surfaced rolls have been in adequate supply in Canada since 1948. No shortages were reported in 1950. Production of both of these materials have been increased in recent months and sufficient capacity exists in the industry to take care of all of the demands which will probably be encountered in 1951.

The following table gives the annual production from 1946 up until the present time:

Year	Asphalt Shingles	Smooth and Mineral Surfaced Rolls
Millions of Squares		
1946.....	2.0	3.0
1947.....	2.1	3.4
1948.....	2.0	2.5
1949.....	2.1	2.4
1950 ¹	2.4	2.5
1951 ²	2.4	2.5

1. Preliminary.
2. Producers' intentions.

MISCELLANEOUS PRODUCTS

Most of the **common colourless window glass** used in Canada is imported. Shipments entering the country come largely from the United Kingdom, Belgium, Czechoslovakia and France. These increased from 44 million square feet in 1946 to 70 million in 1947 and reached a record volume of 96 million square feet in 1948. Canadian imports were in the order of 65 million square feet in 1949, rising to 69 million square feet last year. Fairly large inventories have been on hand for several years. In 1951, it is expected that deliveries from abroad will be scheduled to meet the continuing requirements of the construction industry and that stocks on hand will be adequate to meet any seasonal or local demands which are likely to occur during the year.

It can be seen from the following table that the supply of **paints, pigments, and varnishes** has increased steadily throughout the post-war period. Last year, these materials were in adequate supply. Canadian manufacturers expect to increase production still further in 1951, and imports will probably continue at or about 1950 levels. No serious shortages are expected to occur this year. Difficulties may be encountered in obtaining imported ingredients used in making a few high quality products. However, in most cases, close substitutes will be readily available. While stocks at the producers' level are not as high as the post-war average, wholesalers and retailers are carrying fairly large inventories and builders should have little difficulty obtaining most grades of paints, pigments and varnishes in 1951.

The accompanying table outlines Canadian production, imports and exports of paints, pigments and varnishes since 1946:

Year	Production	Imports	Exports	Domestic Supply
Value in Millions of Dollars				
1946.....	62.5	9.4	4.4	67.5
1947.....	78.9	13.4	7.3	85.0
1948.....	90.2	14.3	6.0	98.5
1949.....	82.9	13.9	3.6	93.2
1950 ¹	87.9	18.4	4.0	102.3
1951.....	91.4 ²	3	3	3

1. Preliminary.
2. Producers' intentions.
3. Not available.

There was no difficulty in obtaining **non-metallic sheathed cable** last year. This commodity has been readily available since 1948. Since then production has risen from 81.1 million linear feet to 87.3 in 1949 and 108.7 million linear feet in 1950. However, in recent months, a sharp increase in housing completions has resulted in local shortages. Manufacturers are also having difficulty obtaining sufficient copper wire and certain insulating materials to maintain output. For these reasons, distributors are now receiving shipments on a quota basis. In 1951, production may increase very little. At the same time, demand will probably remain firm, any decline in housing requirements being largely offset by the erection of barracks and other defence construction.

Rigid insulating boards have been in tight supply for several years. While production has been rising steadily since the end of the war, Canadian mills are still allocating their output to distributors on a voluntary basis and relatively small stocks are being held by manufacturers and retailers. During the current year, one large new plant is expected to come into operation and this, together with some additional production from existing mills, may result in a sizable increase in domestic supply in 1951. At the same time, new construction demands, particularly those related to defence, will result in a somewhat higher level of consumption. The outlook is, therefore, for little improvement in deliveries during the next twelve months.

The following table outlines production, imports and exports of rigid insulating boards since 1946:

Year	Production	Imports	Exports	Domestic Supply
Millions of Square Feet				
1946.....	161.8	11.7	22.6	150.9
1947.....	203.1	24.9	31.9	196.1
1948.....	220.7	3	25.1	195.6
1949.....	222.7	3	19.0	203.7
1950 ¹	227.3	3	12.7	214.6
1951.....	267.4 ²	4	4	4

1. Preliminary.
2. Producers' intentions.
3. Importation prohibited under Emergency Exchange Conservation Act.
4. Not available.

SECTION IV
REFERENCE TABLES

TABLE 1. Production and Production Intentions for Selected Basic and Building Materials in Canada, 1950 and 1951

Material	Unit	Production 1950 ¹	Production Intentions 1951	Percentage Change 1950-1951
Iron and Steel Products:				
Pig Iron	Million Tons	2.3	2.4 ²	+ 4.3
Rolling Mill Products	Million Tons	2.4	2.5 ²	+ 4.1
Plumbing Supplies:				
Cast Iron Soil Pipe and Fittings	Thousand Tons	53.6	59.5	+11.0
Cast Iron Pressure Pipe and Fittings	Thousand Tons	87.9	109.9	+25.0
Steel Pipe and Fittings	Thousand Tons	167.3	167.3	0.0
Sanitary Ware:				
Bath Tubs	Thousand Tubs	138.0	138.6	+ 0.4
Sinks	Thousand Sinks	177.7	177.8	+ 0.1
Wash Basins	Thousand Basins	201.8	232.5	+15.2
Heating Equipment:				
Furnaces — Warm Air and Heating Boilers	Thousand Furnaces	109.3	118.2	+ 8.1
Electric Water Heaters	Thousand Heaters	226.9	267.4	+17.8
Hot Water Storage Tanks (Range Boilers)	Thousand Tanks	188.2	173.8	- 7.7
Cast Iron Radiators	Million Square Feet	7.5	8.1	+ 8.0
Other Iron and Steel Products:				
Wire Nails and Spikes	Thousand Tons	85.6	85.6	0.0
Builders' Hardware	Million Dollars	8.9	9.5	+ 6.7
Sawn Lumber	Billion b.f.m.	5.8	6.0 ²	+ 3.5
Cement and Cement Products:				
Cement	Million Barrels	16.5	16.9	+ 2.4
Concrete Brick and Building Blocks	Million Pieces	122.6	151.2	+23.3
Cement Pipe and Tile	Thousand Tons	154.4	153.6	- 0.5
Clay Products:				
Building Brick (incl. Sand-Lime Brick)	Million Bricks	392.0	406.0	+ 3.6
Vitrified Flue Linings	Million Linear Feet	1.3	1.4	+ 7.6
Vitrified Sewer Pipe	Million Linear Feet	5.4	5.6	+ 3.7
Structural Tile	Thousand Tons	179.0	192.1	+ 7.3
Mineral Wool Products:				
Mineral Wool Batts (All sizes)	Million Square Feet	145.9	173.0	+18.6
Bulk Mineral Wool (Granulated and Loose)	Million Cubic Feet	14.1	14.9	+ 5.7
Gypsum Products:				
Gypsum Wallboard	Million Square Feet	227.4	253.3	+11.4
Gypsum Lath	Million Square Feet	218.9	240.4	+ 9.8
Gypsum Hardwall Plaster	Thousand Tons	166.3	199.7	+20.1
Roofing Products:				
Asphalt Shingles (All weights)	Million Squares	2.4	2.4	0.0
Smooth and Mineral Surfaced Rolls	Million Squares	2.5	2.5	0.0
Miscellaneous Products:				
Paints, Pigment and Varnishes	Million Dollars	87.9	91.4	+ 4.0
Non-Metallic Sheathed Cable	Million Linear Feet	108.7	110.4	+ 1.6
Rigid Insulating Boards	Million Square Feet	227.3	267.4	+17.6

1. Preliminary.
2. Estimated.

TABLE 2. Historical Production of Selected Basic and Building Materials in Canada, 1946-1950

Material	Unit	Post-War Production				
		1946	1947	1948	1949	1950 ¹
Iron and Steel Products:						
Pig Iron	Million Tons	1.4	2.0	2.1	2.2	2.3
Rolling Mill Products	Million Tons	1.6	2.1	2.2	2.2	2.4
Plumbing Supplies:						
Cast Iron Soil Pipe and Fittings	Thousand Tons	25.1	32.5	45.7	47.6	53.6
Cast Iron Pressure Pipe and Fittings	Thousand Tons	65.2	77.7	93.4	91.5	87.9
Steel Pipe and Fittings	Thousand Tons	115.7	118.0	132.0	192.1	167.3
Sanitary Ware:						
Bath Tubs	Thousand Tubs	57.9	81.1	102.1	127.4	138.0
Sinks	Thousand Sinks	103.7	120.7	139.6	188.3	177.7
Wash Basins	Thousand Basins	78.6	91.7	109.7	137.1	201.8
Heating Equipment:						
Furnaces — Warm Air and Heating Boilers	Thousand Furnaces	60.9	72.4	82.4	94.9	109.3
Electric Water Heaters	Thousand Heaters	76.6	121.0	146.7	184.7	226.9
Hot Water Storage Tanks (Range Boilers)	Thousand Tanks	138.4	157.7	180.6	189.1	188.2
Cast Iron Radiators	Million Sq. Ft.	8.0	8.7	8.6	7.2	7.5
Other Iron and Steel Products:						
Wire Nails and Spikes	Thousand Tons	58.9	77.4	86.8	88.5	85.6
Builders' Hardware	Million Dollars	5.6	5.9	9.8	9.6	8.9
Sawn Lumber	Billion b.f.m.	5.1	5.9	5.9	5.3	5.8
Cement and Cement Products:						
Cement	Million Barrels	10.7	12.2	14.0	16.1	16.5
Concrete Brick and Building Blocks	Million Pieces	49.4	63.2	82.6	105.5	122.6
Cement Pipe and Tile	Thousand Tons	94.8	134.7	159.3	137.8	154.4
Clay Products:						
Building Brick (incl. Sand-Lime Brick)	Million Bricks	305.7	334.4	347.1	366.6	392.0
Vitrified Flue Linings	Million Lin. Ft.	0.9	1.0	1.2	1.2	1.3
Vitrified Sewer Pipe	Million Lin. Ft.	3.1	4.0	5.1	4.4	5.4
Structural Tile	Thousand Tons	134.4	150.2	157.3	172.5	179.0
Mineral Wool Products:						
Mineral Wool Batts (All sizes)	Million Sq. Ft.	54.8	82.3	93.4	137.8	145.9
Bulk Mineral Wool (Granulated and Loose)	Million Cu. Ft.	10.1	9.8	10.1	14.8	14.1
Gypsum Products:						
Gypsum Wallboard	Million Sq. Ft.	203.4	213.7	237.7	230.6	227.4
Gypsum Lath	Million Sq. Ft.	75.0	111.1	153.0	174.0	218.9
Gypsum Hardwall Plaster	Thousand Tons	97.3	119.7	137.1	160.8	166.3
Roofing Products:						
Asphalt Shingles (All weights)	Million Squares	2.0	2.1	2.0	2.1	2.4
Smooth and Mineral Surfaced Rolls	Million Squares	3.0	3.4	2.5	2.4	2.5
Miscellaneous Products:						
Paints, Pigments and Varnishes	Million Dollars	62.5	78.9	90.2	82.9	87.9
Non-Metallic Sheathed Cable	Million Lin. Ft.	45.4	67.0	81.1	87.3	108.7
Rigid Insulating Boards	Million Sq. Ft.	161.8	203.1	220.7	222.7	227.3

1. Preliminary.

TABLE 3. Stocks of Selected Basic and Building Materials Held by Manufacturers, December, 1945-1950

Material	Stocks on Hand at December 31						
	Unit	1945	1946	1947	1948	1949	1950 ¹
Plumbing Supplies:							
Cast Iron Soil Pipe and Fittings	Thousand Tons	1.0	1.3	1.6	2.9	4.9	4.2
Cast Iron Pressure Pipe and Fittings	Thousand Tons	2	2	2.3	4.7	8.3	6.6
Steel Pipe and Fittings	Thousand Tons	9.4	17.2	6.7	8.9	17.6	15.0
Sanitary Ware:							
Bath Tubs	Thousand Tubs	2.1	1.0	1.5	0.6	1.2	1.1
Sinks	Thousand Sinks	2.5	3.5	4.8	4.3	13.9	7.5
Wash Basins	Thousand Basins	3.3	3.9	6.8	3.1	6.8	10.2
Heating Equipment:							
Electric Water Heaters	Thousand Heaters	0.1	0.8	3.9	12.1	18.1	24.0
Hot Water Storage Tanks (Range Boilers)	Thousand Tanks	0.3	0.1	0.3	0.2	1.2	2.8
Cast Iron Radiators	Million Square Ft.	0.3	0.4	0.5	0.6	0.6	0.5
Other Iron and Steel Products:							
Wire Nails and Spikes	Thousand Tons	2	3.1	4.4	3.4	5.6	3.5
Sawn Lumber							
Billion b.f.m.	2	0.5	0.5	0.7	0.7	0.5
Cement and Cement Products:							
Cement	Million Barrels	1.4	0.5	0.7	0.6	0.8	0.7
Concrete Brick and Building Blocks	Million Pieces	0.6	1.2	2.2	2.7	6.2	8.2
Cement Pipe and Tile	Thousand Tons	8.3	12.2	10.4	12.9	20.0	22.7
Clay Products:							
Building Brick (incl. Sand-Lime Brick)	Million Bricks	19.0	18.9	21.2	21.2	31.3	25.3
Vitrified Flue Linings	Thousand Linear Ft.	10.7	23.8	26.2	19.0	35.9	18.8
Vitrified Sewer Pipe	Thousand Linear Ft.	12.2	80.7	45.5	85.9	114.0	124.7
Structural Tile	Thousand Tons	9.7	8.5	7.6	9.1	14.4	19.3
Mineral Wool Products:							
Mineral Wool Batts (All sizes)	Million Square Ft.	0.1	0.4	0.6	0.6	2.0	1.7
Bulk Mineral Wool (Granulated and Loose)	Million Cubic Ft.	0.4	0.1	0.1	0.3	0.5	0.4
Gypsum Products:							
Gypsum Wallboard	Million Square Ft.	1.5	1.8	1.2	1.6	1.2	2.6
Gypsum Lath	Million Square Ft.	0.3	0.7	0.6	0.5	0.7	2.1
Gypsum Hardwall Plaster	Thousand Tons	0.6	0.6	0.5	0.9	0.8	0.8
Other Products:							
Non-Metallic Sheathed Cable	Million Linear Ft.	0.2	1.0	0.8	0.8	1.4	1.7

1. Preliminary.
2. Not available.

TABLE 4. Production Intentions and Realization for Selected Building Materials in Canada, 1950

Material	Unit	Production Intentions	Realization ¹	Percentage Realization to Intentions
Plumbing Supplies:				
Cast Iron Soil Pipe and Fittings	Thousand Tons	45.7	53.6	+17.3
Cast Iron Pressure Pipe and Fittings	Thousand Tons	91.4	87.9	- 3.8
Steel Pipe and Fittings	Thousand Tons	184.4	167.3	- 9.3
Sanitary Ware:				
Bath Tubs	Thousand Tubs	157.5	138.0	-12.4
Sinks	Thousand Sinks	234.4	177.7	-24.2
Wash Basins	Thousand Basins	160.9	201.8	+25.4
Heating Equipment:				
Furnace - Warm Air and Heating Boilers	Thousand Furnaces	89.4	109.3	+22.3
Electric Water Heaters	Thousand Heaters	195.0	226.9	+16.4
Hot Water Storage Tanks (Range Boilers)	Thousand Tanks	217.0	188.2	-13.3
Cast Iron Radiators	Million Square Ft.	6.1	7.5	+22.9
Other Iron and Steel Products:				
Wire Nails and Spikes	Thousand Tons	89.7	85.6	- 4.6
Builders' Hardware	Million Dollars	9.8	8.9	- 9.2
Cement and Cement Product:				
Cement	Million Barrels	16.7	16.5	- 1.2
Concrete Brick and Building Blocks	Million Pieces	83.0	122.6	+47.7
Cement Pipe and Tile	Thousand Tons	140.0	154.4	+10.3
Clay Products:				
Building Brick (Incl. Sand-Lime Brick)	Million Bricks	381.6	392.0	+ 2.7
Vitrified Flue Lining	Million Linear Ft.	1.3	1.3	0.0
Vitrified Sewer Pipe	Million Linear Ft.	4.5	5.4	+20.0
Structural Tile	Thousand Tons	185.5	179.0	- 3.5
Mineral Wool Products:				
Mineral Wool Batts (All sizes)	Million Square Ft.	149.0	145.9	- 2.1
Bulk Mineral Wool (Granulated and Loose)	Million Cubic Ft.	16.9	14.1	-16.6
Gypsum Products:				
Gypsum Wallboard	Million Square Ft.	237.6	227.4	- 4.3
Gypsum Lath	Million Square Ft.	188.2	218.9	+16.3
Gypsum Hardwall Plaster	Thousand Tons	168.4	166.3	- 1.3
Roofing Products:				
Asphalt Shingles (All weights)	Million Squares	2.1	2.4	+14.3
Smooth and Mineral Surfaced Rolls	Million Squares	2.0	2.5	+25.0
Miscellaneous Products:				
Paints, Pigments and Varnishes	Million Dollars	89.4	87.9	- 1.7
Non-Metallic Sheathed Cable	Million Linear Ft.	89.5	108.7	+21.5
Rigid Insulating Boards	Million Square Ft.	222.7	227.3	+ 2.0

1. Preliminary.

SECTION V

SOURCES AND EXPLANATORY NOTES

This year the report deals with the same building materials that were covered in Outlook 1950. The thirty building materials which enter directly into new construction or into the repair and maintenance of buildings and other structures dealt with, fall into the following groups: plumbing supplies (3 items), sanitary ware (3 items), heating equipment (4 items), other iron and steel products (2 items), cement and cement products (3 items), clay products (4 items), mineral wool products (2 items), gypsum products (3 items), roofing products (2 items) and miscellaneous building materials (4 items). In addition, primary iron and steel and lumber are covered since the supply of these materials is of importance in construction and in the manufacture of building materials as well as of machinery and equipment.

It should be borne in mind that this report is concerned more specifically with an overall appraisal of the Canadian production and supply position and prospects, although regional variations are discussed in certain cases. Data are obtained from current official statistical sources or from special surveys. All figures for 1950, the latest year, are preliminary as noted. Forecasts for 1951 except in the case of basic materials, represent producers' intentions as seen by them a year in advance. In past years these figures usually have been found to be somewhat conservative while the reverse may be true for this year. A comparison of production intentions and actual production for a number of building materials in 1950 is shown in Table 4, entitled "Production Intentions and Realization for Selected Building Materials in Canada, 1950". No allowance is made in these forecasts for unexpected interruptions in production which may occur due to plant breakdowns, strikes, etc. In connection with forecasts of domestic supply, it should be borne in mind that Canada is not a large exporter or importer of manufactured building materials and supplies.

Production intentions for 1951 are based on surveys of the expected output of nearly all of the companies which produce the building materials covered in this report. The questionnaires were distributed by the Dominion Bureau of Statistics from which estimates of 1951 output were prepared. These estimates were then reviewed by the appropriate agencies of the Department of Trade and Commerce. Special inquiries were made by the Economic Research Division of the Department of Trade and Commerce, in a few cases where the production intentions by the survey seemed unduly high or low. Production intentions for 1951 as published here represent final intentions as they existed at the beginning of 1951.

The statistics used in this report are based on data collected by the Dominion Bureau of Statistics except where otherwise noted. In making use of these statistics, the following points should be kept in mind:

All 1950 figures are preliminary as noted;

Stocks figures are as reported by the producers only and do not include inventories at the wholesale or retail levels.

While the production intentions shown for 1951 represent the best available information at the time of publication, many factors may interfere with these production plans during 1951; e.g., prolonged management-labour disputes, delays in the procurement of machinery, equipment, materials and parts, or an inadequate supply of skilled labour.

Sources and explanatory notes for the materials covered in this report are given below.

Pig Iron covers basic, malleable and foundry iron. The estimate of production for 1951 was prepared by the Steel Division, Department of Trade and Commerce.

Rolling Mill Products. The estimate of production for 1951 was prepared by the Steel Division, Department of Trade and Commerce.

Steel Pipe and Fittings. This group consists of butt-weld and lap-weld steel pipe, steel pipe fittings and seamless steel tubing. The latter type has been added to this classification because of its increased use in building as a substitute for butt-weld pipe.

Sinks comprise flat and roll rim sinks, sink and drain board combinations and sink and tray combinations.

Furnaces. This classification consists of warm air furnaces and cast iron sectional hot water or steam domestic heating boilers.

Electric Water Heaters. This group comprises electric water heaters of the circulating, immersion, wrap-around and storage-tank types.

Hot Water Storage Tanks. This classification consists of galvanized, copper, Everdur and Monel storage tanks and range boilers.

Builders' Hardware. The 1950 production figure is estimated from monthly reports made to the Dominion Bureau of Statistics by firms which accounted for about three fifths of the total 1949 output.

Lumber as used here refers to sawn lumber only. The production intentions for 1951 is an estimate supplied by the Commodities Branch, Department of Trade and Commerce.

Cement refers to the Portland type only. The unit of measure used is the barrel of 350 pounds.

Concrete Brick and Building Blocks comprise concrete brick, concrete solid blocks, concrete hollow blocks, concrete cinder blocks and concrete chimney blocks. The figures shown are estimated from data supplied by the majority of producing firms in the field.

Cement Pipe and Tile includes cement drain pipe, sewer pipe, water pipe and culvert tile.

Building Brick comprises face and common clay brick and sand-lime brick. All figures used are estimates based on data supplied by the majority of producers. Imports have been converted from tons to thousand of bricks to assure comparability with other data.

Mineral Wool Batts. Figures are for 1-inch, 2-inch, 3-inch and 4-inch batts. Imports which are classified as "mineral wool, n.o.p." are reported in pounds and these figures have been converted to square feet, 3-inch basis, on the assumption these imports were batt wool.

Bulk Mineral Wool consists of granulated mineral wool and bulk or loose mineral wool.

Gypsum Hardwall Plaster. Exports and imports are classified as "plaster of paris wall plaster".

Asphalt Shingles comprises asphalt shingles of all weights.

Common, Colourless Window Glass. Canadian production figures are not available for publication.

Non-Metallic Sheathed Cable. Included in this classification are the 12/2 and 14/2 types of non-metallic sheathed cables.

Rigid Insulating Boards. This group consists of panel boards, plaster-base boards, roof boards and other building boards made from pulp or fibre. Exports are classified as "pulp and fibre wallboards" while imports are included in the "wallboard building board" category. From November, 1947 to October, 1950, imports of this item were not allowed under the Emergency Exchange Conservation Act. Both exports and imports are reported in pounds and these figures have been converted to square feet, ½ inch basis, to assure comparability with production data.

